

H.D

Notice of Allowability	Application No.	Applicant(s)	
	09/883,241	MARTINELLI ET AL.	
	Examiner	Art Unit	
	Michael P. Mooney	2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/25/05 Amdt.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 19 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The prior art, either alone or in combination, does not disclose or render obvious at least one retarder arranged in at least one of the first and second interferometric arms to generate first and second polarization states in the first and second interferometric arms, respectively, that are orthogonal to each other for at least one polarization state of the input light signal so that the first polarization state is transmitted by the at least one polarizer and the second polarization state is absorbed by the at least one polarizer, thereby to output the light signal in the output polarization state defined by the at least one polarizer in combination with the rest of claim 1 for the reasons stated by Applicant in the Remarks section filed 3/25/05.

It is noted that the claim 1 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious a phase shifter arranged in one of the first and second interferometric arms to ensure that there is an optical path difference between the first and second interferometric arms that is higher than a coherence length specified for the light signal in combination with the rest of claim 2 for the reasons stated by Applicant in the Remarks section filed 3/25/05.

It is noted that the claim 2 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious at least one polarizer comprising a polarizing element placed in the first and second interferometric arms to define an output polarization state for the light signal in combination with the rest of claim 5.

It is noted that the claim 5 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious an optical network comprising at least one polarization stabilizing device, the at least one polarization stabilizing device comprising: at least one retarder arranged in at least one of the first and second interferometric arms to generate first and second polarization states in the first and second interferometric arms, respectively, that are orthogonal to each other for at least one polarization state of the input light signal so that the first polarization state is transmitted by the at least one polarizer and the second polarization state is absorbed by the at least one polarizer, thereby to output the light signal in the output polarization state defined by the at least one polarizer in combination with the rest of claim 13.

It is noted that the claim 13 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious the italicized portion of the following: a method of polarization stabilization, comprising inputting a light signal into an interferometer arrangement comprising first and second arms *having an optical path difference therebetween greater than the coherence length*

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of the light signal; applying a retardation to the light signal in at least one of the arms so that subsequent to the retardation the light signal has orthogonal polarization states in the first and second arms for at least one polarization state of the input light signal; and applying a polarization with a polarizer so that one of the orthogonal polarization states is absorbed while the other is transmitted in combination with the rest of claim 14 for the reasons stated by Applicant in the Remarks section filed 3/25/05.

It is noted that the claim 14 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious applying a polarization with a polarizer so that one of the orthogonal polarization states is absorbed while the other is transmitted, wherein the polarization is applied in the first and second arms in combination with the rest of claim 15.

It is noted that the claim 15 is allowable because the unique combination of each and every specific element stated in the claim.

The reasons for allowance for claims 6, 8-9 were stated in the previous Office action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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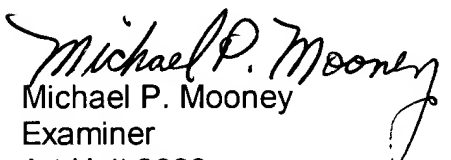
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 571-272-2422. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-

1562.


Michael P. Mooney
Examiner
Art Unit 2883


Frank G. Font
Supervisory Patent Examiner
Art Unit 2883

FGF/mpm
4/13/05